

# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/816,373	04/01/2004	Diethard Gorig	ZTP01P15114	9716	
24131 7.	590 12/19/2005		EXAMINER		
LERNER AN	D GREENBERG, PA	EDGAR, RICHARD A			
P O BOX 2480	O, FL 33022-2480	ART UNIT	PAPER NUMBER		
HOLLIWOOI	D, 1 L 33022-2460		3745		
			DATE MAIL ED: 12/10/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application	Application No. Applicant(s)		****			
		10/816,373	3	GORIG ET AL.				
		Examiner		Art Unit				
		Richard Ed	gar	3745				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exter after - If NO - Failu Any i	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication, period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by stately received by the Office later than three months after the main patent term adjustment. See 37 CFR 1.704(b).	S DATE OF THI R 1.136(a). In no ever iod will apply and will atute, cause the applic	S COMMUNICATION  It, however, may a reply be time  expire SIX (6) MONTHS from  tation to become ABANDONE	I. lely filed the mailing date of this of (35 U.S.C. § 133).				
Status					•			
1)	Responsive to communication(s) filed on							
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	5) Claim(s) is/are allowed.							
6)⊠	☑ Claim(s) <u>1-6,8-15 and 18-20</u> is/are rejected.							
	☑ Claim(s) <u>7,16 and 17</u> is/are objected to.							
8)□	8) Claim(s) are subject to restriction and/or election requirement.							
Applicati	on Papers							
9) 🔲 🤈	The specification is objected to by the Exam	iner.						
10)⊠ The drawing(s) filed on <u>01 April 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	inder 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)☐ Some * c)☐ None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment	c(s)							
	e of References Cited (PTO-892)	•	I) Interview Summary					
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/	08)	Paper No(s)/Mail Da  Notice of Informal Pa		O-152)			
	No(s)/Mail Date 4/1/2004.	,	6) Other:	and the second s				

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#### **DETAILED ACTION**

### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the buffer part tapering conically at a portion to be disposed outside the inflow opening (claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by German unexamined patent application DE 198 55 905 A 1 (Gensler et al. hereinafter).

Gensler et al. show a sealing structure for an inflow opening of a blower housing 16, the blower housing being associated with a centrifugal blower wheel 3, the centrifugal blower wheel and an inner side of the blower housing 16 defining an air gap therebetween, the sealing structure comprising: a sealing ring 21; and a buffer part 19 connected to the sealing ring, the buffer part shaped to surround the inflow opening 17 of the blower housing in a sealing manner; and the sealing ring and the buffer part adapted to be disposed in the inflow opening to substantially fill the air gap between the centrifugal blower wheel 3 and the inner side 18 of the blower housing 16 and to protrude from the blower housing 16.

The sealing ring 21 is of a material suitable for grinding in by the centrifugal blower wheel 3 when the sealing ring is in an installed position on the blower housing 16.

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The buffer part 19 is of an elastic material (see col. 2, line 32).

The sealing ring 21 and said buffer part 19 are formed as a one-piece body and from one material (see Fig. 1).

The sealing ring and the buffer part are integral (see Fig. 1).

The sealing ring 21 is of an elastic material and is to be slipped by the centrifugal blower wheel when the sealing ring is on the blower housing in an installed position (see Abstract).

The blower housing 16 is part of a blower comprising an electric motor 1 and a drive shaft 2 connected to the electric motor.

Claims 1-6 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,439,843 (Finkenbinder hereinafter).

Finkenbinder shows a sealing structure 100 for an inflow opening of a blower housing 28, the blower housing being associated with a centrifugal blower wheel 26, the centrifugal blower wheel 26 and an inner side of the blower housing 28 defining an air gap therebetween, the sealing structure 100 comprising: a sealing ring 110; and a buffer part 102 connected to the sealing ring, the buffer part shaped to surround the inflow opening 30 of the blower housing 28 in a sealing manner; and the sealing ring 110 and the buffer part 102 adapted to be disposed in the inflow opening to substantially fill the

air gap between the centrifugal blower wheel 26 and the inner side of the blower housing 28 and to protrude from the blower housing (see Fig. 5).

The buffer part 102 has an outer contour adapted to an inner contour of an opening to be sealed (see Fig. 5).

The sealing ring 110 is of a material suitable for grinding in by the centrifugal blower wheel when the sealing ring is in an installed position on the blower housing (see col. 5, lines 5-7).

The buffer part 102 is of an elastic material (see col. 4,line 66).

The sealing ring 110 and said buffer part 102 are formed as a one-piece body and from one material (see Fig. 5).

The sealing ring 110 and the buffer part 102 are integral (see Fig. 5).

The sealing ring 110 is of an elastic material (see Fig. 5 and col. 4, line 66) and is to be slipped by the centrifugal blower wheel when the sealing ring is on the blower housing in an installed position (see col. 5, lines 5-7).

The blower housing 28 is part of a blower comprising an electric motor 12 and a drive shaft 16 connected to the electric motor.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over German unexamined patent application DE 198 55 905 A 1 (Gensler et al. hereinafter) as applied to claim 1 above.

Gensler et al. describe the elastic material as being a combination of plastic and natural fibers (see col. 1, lines 57-59), but do not recite the mechanical properties of the elastic material including the hardness, strength, elasticity and elongation.

Applicant has not disclosed that choosing an elastic material with the claimed properties solves any stated problem or is for any particular purpose. Moreover, it appears that the seal of Gensler et al., or Applicants' invention, would perform equally well being made from an elastic material having mechanical properties which allow the fan to be operated under normal conditions.

Accordingly, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have modified Gensler et al. such that the elastic material has either 1.) a hardness of between approximately 40 Shore and approximately 50 Shore, 2.) a strength of between approximately 10 N/mm² and approximately 20 N/mm², 3.) an elasticity of between approximately 40% and approximately 60%, or 4.) an elongation of between approximately 150% and 300%, because such a modification would have been considered a mere design consideration which fails to patentably distinguish over Gensler et al.

Claims 12, 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over German unexamined patent application DE 198 55 905 A 1 (Gensler et al. hereinafter) as applied to claims 8, 9, 10 and 11, respectively, above.

Gensler et al. teach of choosing an elastic material but do not state that the material maintains its mechanical properties after ageing.

At the time the invention was made it would have been obvious to a person having ordinary skill in the art to choose a material which maintains its mechanical properties during use, over a material which does not maintain its mechanical properties during use, since it is common practice in the art to prolong the wear life of seals. Therefore, choosing a long-lasting elastic material as the seal would have been considered an engineering expedient which fails to patentably distinguish Applicants' invention over the Gensler et al. seal.

## Allowable Subject Matter

Claims 7 and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-

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4816. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7 am- 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard Edgar Examiner Art Unit 3745

RE